### UNITED STATES PATENT OFFICE

In Re Application of: Confirmation Number: Michael Orr 5618 Group Art Unit: Serial No.: 09/788,545 3627 888888888 Filed: Examiner: 21 Feb. 2001 **REFAI, Ramsey** Atty. Docket Number: Title: A SYSTEM AND METHOD TO **ACCELERATE** 06001.1003

#### **REPLY BRIEF**

Mail Stop Appeal Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

**CLIENT/SERVER** 

INTERACTION USING PREDICTIVE REQUESTS

To the Office:

Applicant's attorneys are now in receipt of Examiner's Answer, mailed on September 2, 2009 in response to the Appeal Brief filed by applicant on November 25, 2008. The applicants are submitting this reply brief under 37 CFR 41.41 and respectfully request the entrance into the record.

#### **Status of Claims**

On October 28, 2008 the applicant file a request for continued examination along with a preliminary amendment for this case. The Office then issued a final office action as a first action in the continued examination on November 25, 2008. From this point, the applicants filed a preappeal brief with a request for review. As such, the state of the claims as presented in the October 28, 2008 preliminary amendment have been entered and represent the current state of the claims before the Office.

The current claims are number 1-33 and have the following current status:

Claims 1, 2, 7-9, 11, 12, 15, 17-19 and 21 currently stand rejected by the Office.

Claims 3-6, 10, 13, 14, 16, 20 and 22-33 have been previously canceled.

The claims that are being appealed include claims 1, 2, 7-9, 11, 12, 15, 17-19 and 21.

Claims 1 and 11 are the only independent claims with claims 2 and 7-9 depending from claim 1 and claims 12, 15, 17-19 and 21 depending from claim 11.

## Grounds of Rejection to be Reviewed on Appeal

The current rejections that are being presented for review on appeal are two-fold:

- (1) The Office has presented a rejection of claims 1, 2, 7-8, 11, 12, 15, 17-18 and 21 under 35 USC 102(e) as being anticipated by United States Patent Number 7,047,485 issued in the name of Klein.
- (2) The Office has rejected claims 9 and 19 under 35 U.S.C. 103(a) as being unpatentable over Klein et al in view of Official Notice.

## Rejections under 35 U.S.C. 102(e)

The Office has relied upon the Klein reference in rejecting the above-identified claims. In rejecting the claims, the Examiner equates the following elements in Klein to the identified claimed elements:

Klein Elements	Claimed Elements
Browser 110	Client
Applet 124	Client Agent
Web Agent 116	Predictive Server
Web Server 112	Server

With regards to rejections of claim 1, the examiner has presented the following grounds of rejection:

- (a) the Examiner alleges that claim element of "a predictive server in association with said server, wherein said predictive server comprises a server analyzer unit and a server storage unit" is described at column 6, lines 10-20 and Fig. 1. In essence, the Examiner is equating the Web Agent 116 that is running on the web server 112 to the claimed predictive server.
- (b) The Examiner alleges that the element of "a client agent in association with the client, wherein the client agent comprises an agent analyzer unit and an agent storage unit" is described in column 6, lines 64-67 and Fig. 1. Here the Examiner is equating the Java Applet 124 running on the client 104 to the client agent.

- (c) The Examiner alleges that the element of "the predictive server analyzes, at the predictive server analyzer unit, a first response that is received from said server acting on a request for a web page" is describe in column 5, lines 28-38.
- (d) The Examiner alleges that the element of "and, accordingly generates at the predictive server storage unit a predictive list of requests for objects which are needed for presenting the requested web page" is described in column 6 lines 10-29.
- (e) The Examiner alleges that the element of "and wherein the predictive server further issues predictive requests to the server, receives predictive responses from the server" is described in column 6 lines 24-36. Here the Examiner states that request for web objects in an object list are made to the web server 112 which can then obtain the requested object from the application server 114 citing column 5, lines 35-38.
- (f) It is noted that the Examiner did not cite any basis to support rejection including the element of "and forwards the first response and the received predictive responses to the client agent".
- (g) The Examiner alleges that the element of "wherein the client agent receives, with the agent analyzer unit of the client agent, via the predictive server, the first response" is described in column 5, lines 28-38.
- (h) The Examiner alleges that the element of "analyzes the first response" is described in column 6, lines 34-67.
- (i) The Examiner alleges that the element of "automatically forwards said first response to the client" is described in column 6 lines 28-36.
- (j) The Examiner alleges that the element of "receives from the client a request for an object contained in the first response and is needed for presenting the requested web page" is disclosed in column 7 lines 1-37.
- (k) The Examiner alleges that the element of "compares the request for said object with the already received predicted responses, and when an already received corresponding predicted response exists, the existing predictive response is forwarded to the client" is disclosed in column 5, lines 39-45 and column 3 lines 43-59.

With regards to claim 2, the Examiner has presented the following grounds of rejection:

(l) The Examiner alleges that the element of "wherein the client agent further compares the request against an agent's predictive list which is generated based on the client agent analyzing

the first response, and if no entry for that request for an object is found, the request is forwarded towards the server" is described in column 6 lines 10-53. The Examiner states that the precaching operates by first checking to see if the object requested is available prior to sending the request to the server.

With regards to claim 7, the Examiner has presented the following grounds of rejection:

(m) The Examiner alleges that the element of "wherein said client agent receives requests from said client and forwards the requests to said predictive unit using encapsulation" is described in column 4, lines 15-28. The Examiner states that the request is sent in web pages.

With regards to claim 8, the Examiner has presented the following grounds of rejection:

(n) The Examiner alleges that the element of "wherein data transmitted between said client agent and said predictive server undergoes a data processing step selected from a group consisting of data compression, partial information transfer, protocol conversion, and data packet combining" is described in column 3, lines 59-63.

With regards to claim 21, the Examiner has presented the following grounds of rejection:

(o) The Examiner alleges that the element of "wherein said client agent is further capable of issuing a re-load command" is described in column 4, lines 15-27.

With regards to claims 11, 12, 15 and 17-18, the Examiner alleges that these claim recite similar elements and are summarily rejected under the same rational as the rejections for claims 1, 2, 7, 8 and 21.

### Rejections under 35 U.S.C. 103(a)

The Examiner has relied upon the Klein reference in view of Official Notice in rejecting the above-identified claims.

The Examiner continues to allege that official notice applies in the support of rejecting claim 9 and 19 as being obvious.

With regards to claim 9, the Examiner has presented the following grounds of rejection:

(p) The Examiner admits that Klein does not teach the element of "wherein the client agent is adapted to transmit a fake response to a client before a real response from said server has been received." However, the Examiner alleges that such an action is well known in the art.

### Argument

These arguments were previously presented in the appeal brief and are not being presented again but, the applicant states that the arguments are fully applicable and that the below statements are only addressing the specific points that the Examiner has raised regarding specific arguments that were presented in the Appeal Brief.

It should be noted that the argument identifications presented by the Examiner are confusing and do not have any apparent correlation to the structure of the arguments presented in the Appeal Brief. In the Appeal Brief, two general arguments are presented and labeled as Argument 1 and Argument 2. Then, in addressing each of the rejections presented by the Examiner, the applicant identified them as argument a-p. The Examiner has not presented Arguments A-H. To assist the Office in the review of the following replies to the Examiner's response, the applicant provides correlating information at the beginning of each rebuttal.

# **Argument A: Rebuttal of Argument 1 in Appeal Brief**

The Examiner argued against the logic presented in Argument 1 of the Appeal Brief by focusing only on applicant's statement that Klein is focused on a web page to web page transition level, whereas the claimed invention is focused on a single web page request level, not web page to web page transitions. The Examiner alleges that this distinction is not recited in the claim. The applicant respectfully disagrees.

Argument 1 presented in the Appeal Brief is quite detailed with regards to the claim language, and the comparison of how the claims operate in view of what Klein teaches. And so, while the claims do not use the explicit language as presented in the argument, the reason is because the argument is summarizing what is claimed in a manner that is more easily understood. Nonetheless, the elements necessary to create this distinction are clearly present in the claims. The applicant shows that this distinction is indeed recited in the claim by presenting the following table to compare the exact language compared to the functional language presented in the argument.

Claim Language	Relationship to described argument
the predictive server analyzes, at the predictive server analyzer unit, a first response that is received from said server acting on a request for a web page generates at the predictive server storage unit a predictive list of requests for objects which are needed for presenting the requested web page wherein the predictive server further issues predictive requests to the server, receives predictive responses from the server, and forwards the first response and the received predictive responses to the client agent client agent receives, the first response, analyzes the first response, automatically	a single web page request level: the first response is received in response to a request for a web page, this is clearly a single web page.  This is still operating on the request for the same web page.  This language is all still focusing on the same web page that is associated with the first response received upon the request for the single web page.  Here, the claim language clearly recites that at the client side, the same, single web page is
forwards said first response to the client, receives from the client a request for an object contained in the first response and is needed for presenting <b>the requested web page</b> , compares the request for said object with the already received predicted responses, and when an already received corresponding predicted response exists, the existing predictive response is forwarded to the client.	being assembled.

Thus, the applicant respectfully submits that although the claim does not explicitly use the term a single web page request level, it is very clear from the claim language that the claim is operating on a request for a single web page, not obtaining information for a current and a next web page. Furthermore, the applicant respectfully submits that independent claims, 1 & 11, clearly recite a single web page. The term 'web page' is mentioned several times in the independent claims. In the first time it is associated with the definition 'a requested web page' and in each following times, is mention as 'the requested web page'. So it is clear that the independent claims are limited to a single web page to the requested web page. Therefore, the first argument is correct; the claimed invention is focused on a single web page request level.

Klein invention teaches web page to web page transitions as it is clearly defined in Klein's teaching. Klein's claim 1 recites that a first web page is requested and then identifying one or

more web pages likely to be accessed next and accelerating their fetching. So it is clear to a skilled person in the art that Klein's invention focused on web page to web page transition level.

## Argument B: Rebuttal of one point made in Argument 2 of the Appeal Brief

The Examiner has disagreed with the argument that Klein's web agent 116 does not receive a response from the server and Klein's web agent 116 does not forward any responses. The Office cites Klein Col. 5 lines 31, 39-45 and 65-67 which only describe a transaction that is generated that will request a web page from a web server 112, the web server receiving a resultant web page that was built by the web servers local processing or a web applications 114 additional processing, and the page is transmitted to a web browser 110.

The applicant again states that this is not the same as what is recited in the claims. Klein describes creating and sending a web page by the web server 112 and not receiving the web page and analyzing it by the web agent 116, which is the equivalent element to the claimed predictive server. Furthermore Klein's web agent does not generate predictive list of requests for objects which are needed for presenting the requested web page, it is clear that the first response as claimed, is not analogous to the website received in Klein and thus, there is no first response received or forwarded by the web agent 116. Further, the web agent 116 in Klein is only one element in web server 112. Operations which are executed by the web server 112 cannot be read as be executed by Klein's web agent 116. The web agent 116 is one of many other software codes that are running on the web server 112. Klein is silent regarding which element included in the web server 112 executes those operations.

More specifically, the examiner states that he disagrees with the statements "Klein does not receive a response from the server" and "Klein does not forward any response". However, this is not the argument presented by the applicant. The claims recite specific structures and the Examiner has failed, and continues to fail to show the equivalent of these structures. As such, the Examiner's position is ambiguous in that it is not possible to understand what elements the examiner refers to as meeting the claimed elements. Is it Klein's web server 112, Klein's web agent 116, Klein's browser 110, or Klein's applet 124, or some other component? The applicant

has carefully dissected Klein, trying to show different scenarios of mapping the components in Klein to the claimed elements but in all such possible mappings, the comparison between Klein and the claim fails.

# Argument C: Rebuttal of a portion of Argument 2 and arguments a and c in the Appeal Brief

The Examiner disagrees with the applicant's position that the web agent 116 is not operating as the claimed predictive server; the web agent 116 is never described as receiving a first response from the server in response to the server acting on a request for a web page. The Examiner cites Klein, col. 5 lines 22-27, 32, 39-41 and 59. In the first portion of Argument 2, the applicant presents several possible interpretations of Klein, none of which result in having the equivalent of the predictive server operating as claimed.

Klein describes sending a request for a web page to a web server 112. Col. 5 lines 28-31. The web server 112 can process this request or forward it to an application server 114. Col. 5 lines 31-38. The web server 112 then receives a resultant web page built by local processing or web application 114. Col 5, lines 39-41. The web page is then transmitted to the web browser 110 over the network 102. Col. 5, line 66 to col. 6 line 1. If the web page includes a tag for Java Applet program, this Java Applet program can be requested over the network by the web browser 110 and once received, executed as a program. Col. 6 lines 1-8. This Java Applet then makes requests to the Web Agent 116 which provides an object list to the Java Applet and the Java Applet then makes requests for those items in the object list.

The applicant argues that it is not just to reject the claims based on piecemeal statements extracted from the Klein reference without regard to the overall function being described by Klein.

Klein's object list identifies objects to be fetched in response to a <u>next</u> web browser transaction, not the <u>current</u> transaction. But further, the claims recite that the predictive server, which the Examiner has compared to the Web Agent 116 makes the requests for objects. However, in Klein, the Java Applet 124, which the Examiner equates to the recited client agent, is described as making these requests. Thus, based on the Examiner's own interpretation of Klein, Klein fails

to teach a predictive server (Web Agent 116) that fetches objects from the web server, much less objects to build a currently requested web page.

Thus, taken in the full context, Klein does not describe the predictive server as claimed.

## Argument D: Rebuttal of a portion of Argument 2 and argument d in the Appeal Brief

The Examiner has disagreed with the argument that Klein does not teach generating at the predictive server storage unit a predictive list of requests for objects, which are needed for presenting **the requested web page**, based on an analysis of information contained within said stored first response.

As described in Argument 1 and Argument 2, and even admitted to repeatedly in the Examiner's argument presented in the reply to the appeal brief, the Java Applet on which the Examiner relies upon, generates a list of objects for a **next** web page, not the one that is currently being requested. As is clear from the claim language, the requested web page is one that is presently being operated upon and being rendered, not a next web page that statistically is predicted to be requested. Because of the huge disparity between what the function recited in the claims is and that which is described in Klein, (i.e., presenting a currently requested web page, as recited in the claim versus obtaining a list of objects needed for a statistically determined next webpage to fetch), the applicant is at a loss as to why the Examiner keeps pushing this point. If it is that the Examiner is attempting to say that the "next web page" for which objects are being presently fetched is the equivalent of the "currently requested web page" once the next web page is finally requested and that the "first response" is the initial web page, the applicants state that (a) the Examiner has certainly not made this clear and (b) that this analogy simply does not work. The claimed first response is a responses received after requesting a current web page. As such, the initial web page in Klein cannot be the first response because the "next web page" to which the first response must be received as a result of requesting the "next web page" is received prior to such request.

Thus, the applicants are at a loss as to why the Examiner is pushing this point because the differences are blatantly clear.

### Argument E: Rebuttal of a portion of Argument 2 and argument e in the Appeal Brief

The Examiner disagrees with the applicant's position that Klein does not issue predictive requests to the server and does not receive predictive responses. As pointed out in Argument 2 and argument e, the Examiner continues to switch his definition of the Java Applet 124 between being equivalent to the predictive server and the client agent, as is convenient to support the Examiner's argument. The applicant has argued that the Java Applet 124 cannot be both and in either case, still operates to request objects necessary for a **next** requested web page, not the currently requested web page. Further, the Java Applet 124 has not even been active until after the resulting web page is received by the browser 110 in Klein and as such, cannot operate as a predictive server or a client agent.

## Argument F: Rebuttal or Argument 1 and argument h in Appeal Brief

The Examiner states that the applicant's argument that the object list used by Klein is created based on statistical method and not by parsing a received first response to a request for a web page is not recited in the claims. First of all, the applicant did not argue that the first response is parsed. Rather the applicant argues that the first response is analyzed (see argument h). The applicant submits that the Examiner is focused on form rather than facts. The Examiner states that the claim teaches that a predictive list is generated but does not mention how that list is generated. The applicant disagrees. The claim clearly recites that the predictive server "analyzes" the first response to generate a predictive list. It is not understood why the Examiner has argued that the applicant stated the first response is parsed. However, even if that argument had been made, it is clear and well known that in order to conduct such an analysis, that the response must be examined and parsing is simply a term in the art that may be used for such a process, but parsing is not mentioned in the claim. Nonetheless, the first response is "analyzed" to generate the predictive list, which action cannot be equated to the operation in Klein's web agent 116 that generates an object list based on statistical method. Clearly, Klein must reach out to something other than a first response in order to obtain this information. Thus, the object list in Klein is not the same as the predictive list recited in the claims and as such, cannot be generated by analyzing the first response.

### **Argument G: Rebuttal of argument o in the Appeal Brief**

The Examiner disagrees with the applicant's argument that Klein does not teach the client agent being further capable of issuing a re-load command. The applicant stands by its position that Klein is simply not applicable to this element and the Examiner has failed to show any relevancy. Rather, the Examiner points at language that the applicant simply offered to help clarify the understanding of this claimed element and argues that the explanatory language is not included in the claim. The applicant's do not disagree, the claim stands as is, allowable over Klein because the Klein reference does not describe, suggest or teach the element of a client agent that receives the response to one or more predictive requests after the client agent forward the client's request for reload to the predictive server.

## Argument H: Rebuttal of argument p in the Appeal Brief

The Examiner continues to assert that the Official Notice presented in the final office action is taken to be admitted art. The applicant respectfully disagrees. The response to the final office action rendered the Examiner's position as moot, and nonetheless, in the appeal brief the applicant has challenged such position as not being supported by evidence. The applicant has made a bona fide attempt to challenge such position and explicitly requests the Examiner to produce authority for his statement. The position of the Examiner is unconscionable. The claimed element of the client agent being adapted to transmit a fake response to a client before a real response from said server has been received, as presented in claim 9 which depends from claim 1, and claim 19 which depends from claim 11 is not known in the art because it is operating within the confines of an invention that is novel and non-obvious. As such, the applicant expressly rejects the Office's assertion regarding the admitted art, has expressly shown the error in the Office's position, and request the Office to present evidence in support of its position.

The Office has failed to address a significant argument presented by the applicant under the heading Argument 2 in the Appeal Brief. In Argument 2, the applicant argued that the structures described in Klein do not equate to the structures recited in the claims. Quoting from this argument, the applicant stated "However, as is clear from the Klein reference, the Java Applet

124 was not even active at the time that the first response to a requested web page is transferred to the browser 110, Klein teaches that the Web Browser 110 requests the Java Applet 124 after receiving and analyzing the first response [Klein at Col. 5 lines 66 through Col. 6 line 8 and in Col. 9 lines 24-31]. As such, the Java Applet 124 cannot be the equivalent of the client agent which certainly must exist in order to receive the first response, analyze it and forward it to the client (the browser). Thus, the office cannot and must not equate the Java Applet 124 to the recited client agent..."

Because the Examiner is silent regarding this argument, the applicant respectfully submits that the Office must be in agreement with and accepts this argument. Consequently, Klein's applet 124 is not analogous to the claimed "client agent" and therefore the present claims are in condition for allowance.

Further, in the examiner's response to the appeal brief, the examiner dose not refer to several arguments against specific grounds of rejection for Claim 1 that are written in the appeal brief. For example the examiner does not respond to at least the following arguments: (g); (i); (j) and others that are mentioned in the appeal brief.

Furthermore, also in this response the examiner did not cite any basis to support rejection of the limitation of the predictive server as it is written in the claim: "... and forwards the first response and the received predictive responses to the client agent...".

Again, the applicant asserts that the Examiner's silence is an indicating that the arguments have been accepted by the Office.

Finally, the Examiner at this late stage raises a question regarding the structure of the system claims. The applicant suggest that such objections should have been raised long ago and that because they are not, that it is clear that the system claims have been interpreted as having elements configured to perform the recited functions, which is acceptable matter in system claims.

## Conclusion

The applicant has presented arguments addressing each point presented by the Examiner in the Examiner's response to the Appeal Brief. If the Board has any questions or if there are any actions that can be handled through an amendment, the applicant requests the Board to contact the attorney of record using the below-provided contact information.

Respectfully submitted,

/Gregory Scott Smith/

By:\_\_\_\_\_

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